

Apply filters to SQL queries

Project description

This project demonstrates how to use SQL queries with WHERE, AND, OR, and NOT filters to retrieve specific login and employee records. The goal was to locate login issues, audit departments, and support data filtering skills for cybersecurity and IT tasks.

```
Activity: Filter with AND, OR, and NOT

1092 | o391p779q935 | lpark | Sales | West-227 |
1098 | u671v146w618 | tarchamb | Sales | North-423 |
1099 | v283w690x104 | anaser | Finance | West-357 |
1105 | b551c837d758 | kmei | Finance | Central-232 |
1107 | d168e758f876 | akajwara | Sales | North-471 |
1109 | f229g533h679 | nlocklea | Sales | East-196 |
1110 | g567h376i314 | pchaudhu | Sales | Central-428 |
1111 | h835i179j862 | jlee | Sales | West-309 |
1116 | m272n572o874 | nzhao | Sales | South-100 |
1117 | n683o758p820 | dahmad | Sales | West-405 |
1118 | o305p208q337 | jpark3 | Sales | South-329 |
1119 | p164q780r999 | omubarak | Sales | West-409 |
1121 | r628s557t397 | mrojas | Sales | East-288 |
1122 | s103t952u851 | btorres | Finance | West-319 |
1130 | a317b635c465 | tsnow | Sales | Central-451 |
1136 | g299h520i457 | jhawes | Finance | West-416 |
1138 | i671j355k725 | sromero | Finance | South-329 |
1142 | m674n127o823 | lsilva | Finance | East-440 |
1144 | NULL | erobinso | Finance | Central-266 |
1147 | r454s225t299 | tvega | Finance | West-177 |
1148 | s328t505u907 | dharvey | Finance | South-181 |
1159 | d881e710f732 | jshen | Finance | East-193 |
1164 | i682j513k442 | fsmeltz | Finance | North-163 |
1169 | NULL | mmitchel | Sales | Central-250 |
1174 | s371t911u987 | eortiz | Finance | North-428 |
1175 | t959u687v394 | jclark2 | Finance | North-194 |
1176 | u849v569w521 | nliu | Sales | West-220 |
1181 | z803a233b718 | sessa | Finance | South-207 |
1185 | d790e839f461 | revens | Sales | North-330 |
1186 | e281f433g404 | sacosta | Sales | North-460 |
1187 | f963g637h851 | bbode | Finance | East-351 |
1188 | g164h566i795 | noshiro | Finance | West-252 |
1195 | n516o853p957 | orainier | Finance | East-346 |
-----+-----+-----+-----+-----+
71 rows in set (0.001 sec)

MariaDB [organization]> SELECT * from employees where department = "Finance" OR department = "Sales";
```

Retrieve after hours failed login attempts

```
SELECT *
FROM log_in_attempts
WHERE success = FALSE
AND (login_time < '08:00:00' OR login_time > '17:00:00');
```

Retrieve login attempts on specific dates

```
SELECT *  
FROM log_in_attempts  
WHERE login_date = '2023-07-01'  
    OR login_date = '2023-07-05';
```

Retrieve login attempts outside of Mexico

```
SELECT *  
FROM log_in_attempts  
WHERE country != 'Mexico';
```

Retrieve employees in Marketing

```
SELECT *  
FROM employees  
WHERE department = 'Marketing';
```

Retrieve employees in Finance or Sales

```
SELECT *  
FROM employees  
WHERE department = 'Finance'  
    OR department = 'Sales';
```

Retrieve all employees not in IT

```
SELECT *  
FROM employees  
WHERE department != 'Information Technology';
```

Summary

In this project, I practiced using SQL filtering commands such as WHERE, AND, OR, and NOT to extract specific employee and login data. These queries allowed me to retrieve failed login attempts after work hours, filter login activities by date or country, and isolate employees by department. Learning how to apply these SQL filters gave me hands-on experience with data queries commonly used in cybersecurity and IT operations to monitor access and enforce data rules.